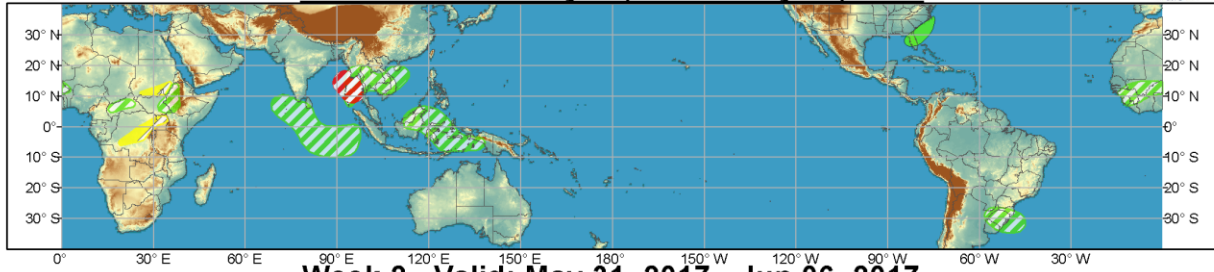




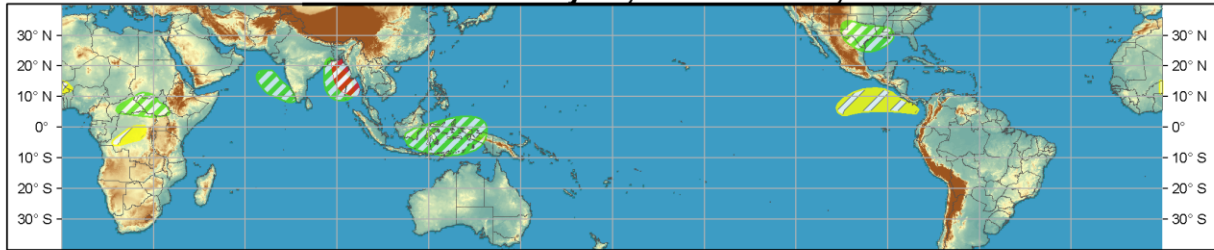
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: May 24, 2017 - May 30, 2017



Week 2 - Valid: May 31, 2017 - Jun 06, 2017



Confidence
High Moderate

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater strength).
- Above-average rainfall** Weekly total rainfall in the upper third of the historical range.
- Below-average rainfall** Weekly total rainfall in the lower third of the historical range.
- Above-normal temperatures** 7-day mean temperatures in the upper third of the historical range.
- Below-normal temperatures** 7-day mean temperatures in the lower third of the historical range.

Produced: 05/23/2017

Forecaster: Artusa

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



During the past week, both the CPC velocity potential anomaly based index and the RMM index indicate eastward propagation of a weak subseasonal signal over the Indian Ocean. Low-level (850-hPa) westerly wind anomalies recently developed just north of the equator in the North Indian Ocean, while easterly wind anomalies persisted over the western Pacific, at about the same low latitude. This implies convergence of mass across the area of the Maritime Continent, leading to rising motion. Upper-level (200-hPa) zonal wind anomalies are of the opposite sign to those at low levels from the eastern Indian Ocean to near the Date Line, implying the divergence of mass at the upper levels of the troposphere. The outgoing longwave radiation (OLR) anomaly field depicts the recent development of enhanced tropical convection across the tropical Indian Ocean and the Maritime Continent, and suppressed convection across much of the tropical Pacific. The OLR anomaly field also depicts a slight eastward displacement (from climatology) of the South Pacific Convergence Zone (SPCZ).

Most dynamical models predict that other modes of tropical variability (in particular, Equatorial Rossby Waves or ERWs) will obscure the MJO signal as it traverses the Indian Ocean basin and the Maritime Continent over the next two weeks. Some models redevelop an eastward-moving convective signal over the Indian Ocean during Week-2, with a few (particularly the European model) taking the intraseasonal

signal across the Maritime Continent. The Indian Ocean Dipole (IOD), which had been in a persistent negative phase, is now in its neutral phase, according to the Australian Bureau of Meteorology (BoM). The BoM predicts the IOD will become positive during the next few months, which would be associated with abnormally warm sea surface temperatures (SSTs) and enhanced convection over the western portion of the Indian Ocean basin.

Only one tropical cyclone (TC) was in progress during the past ten days across the global tropics; Ella, a minimal category 1 Cyclone over the South Pacific (09-14 May). Ella tracked northwestward between Fiji and American Samoa, bringing heavy rain and strong winds to the nearby islands of Wallis and Futana. During the next two weeks, the best chance for a TC to develop is over the Bay of Bengal, according to the ECMWF and GFS models, Taiwan's TC tracker tool, and subseasonal signals. The latest ECMWF model run predicts the formation of a low pressure center around 0z on 27 May off the coast of Burma/Myanmar. Over the ensuing few days, the budding disturbance intensifies and tracks northward, reaching the Bangladesh/Myanmar coast on 31 May. The latest GFS solution forecasts the development of a weak Low over the central Bay of Bengal around 12z on 29 May, which then tracks northward towards the Bangladesh coast, yet remains weak in intensity. The GFS has shown fairly poor day-to-day continuity regarding the evolution of this potential TC. The TC tracker tool from the Central Weather Bureau in Taiwan also favors potential TC activity in the Bay of Bengal region.

During Week-1, areas of above-average rainfall are predicted (with moderate confidence) across parts of the central and eastern Indian Ocean, Southeast Asia, and parts of the Maritime Continent due to the expectation of a subseasonal signal progressing into this region. The MJO signal is forecast to be partially masked/obscured by other modes of tropical variability, such as ERWs and Kelvin Waves. Enhanced rainfall is possible across the Andaman Sea and eastern Bay of Bengal, associated with the potential development of a TC. Other areas of above-average rainfall are predicted off the U.S. East Coast and Florida (high confidence), and in southern Brazil/Uruguay (moderate confidence); both are attributed to influences expected from mid-latitude baroclinic systems.

During Week-2, three areas of above-average rainfall are forecast (with moderate confidence) across the North Indian Ocean/Maritime Continent region, due to suspected MJO activity, along with some interference from other modes of tropical variability (ERWs and Kelvin Waves). Another area of predicted above-average rainfall is over the south-central contiguous U.S. (with moderate confidence) due to mid-latitude frontal activity. Below-average rainfall is anticipated over the far eastern Pacific, just west of Central America, with moderate confidence. This area, along with all the other predicted regions of anomalous precipitation for both Week-1 and Week-2, are primarily based on areas of agreement between ECMWF and GFS model forecasts for rainfall.

Forecasts over Africa are made in consultation with CPCs international desk, and can represent local-scale conditions in addition to global-scale variability.